Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Canceled)

2. (Canceled)

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3. (Currently amended) The method of claim [[2]] 48, wherein the plurality of test compounds are each provided attached to a solid support through a cleavable linkage and are subsequently cleaved from the solid support.

4. (Currently amended) The method of claim [[2]] 48, wherein the linkage is severable by irradiation with light.

5. (Canceled)

6. (Currently amended) The method of claim [[5]] 3, wherein the solid support is associated with a molecular sensor that can detect nitric oxide.

7. (Currently amended) The method of claim [[5]] 6, wherein the molecular sensor is 2,3-diaminonaphthalene (DAN).

8. (Withdrawn and currently amended) The method of claim [[5]] 6, wherein the molecular sensor is diaminofluorescein.

9. (Previously presented) The method of claim 6, wherein the molecular sensor is characterized in that at least one optical property of the sensor is altered in the presence of nitric oxide.

10. (Currently amended) The method of claim [[2]] 48, wherein the test compounds are small molecules.

11. (Withdrawn and currently amended) The method of claim [[2]] 48, wherein the plurality of test compounds is a combinatorial library of chemical compounds.

12. (Withdrawn and currently amended) The method of claim [[2]] 48, wherein the plurality of test compounds is a combinatorial library of small molecules.

13. (Withdrawn and currently amended) The method of claim [[2]] 48, wherein the test compounds are proteins.

14. (Withdrawn and currently amended) The method of claim [[2]] 48, wherein the test compounds are peptides.

15. (Withdrawn and currently amended) The method of claim [[2]] 48, wherein the test compounds are nucleic acids.

16-24. (Canceled)

25. (Withdrawn and currently amended) The method of claim [[2]] 48, wherein the cells are macrophages.

26. (Currently amended) The method of claim [[2]] 48, wherein the cells are yeast.

27. (Withdrawn and currently amended) The method of claim [[2]] 48, wherein the cells are mammalian cells.

28. (Withdrawn and currently amended) The method of claim [[2]] 48, wherein the cells are human cells.

29. (Withdrawn and currently amended) The method of claim [[2]] 48, wherein the cells are bacterial cells.

30. (Canceled)

31. (Canceled)

32. (Currently amended) The method of claim [[5,]] 6, 7, 8, or 9, wherein the step of identifying further comprises sorting the solid supports using fluorescence-activated bead sorting (FABS).

33. (Original) The method of claim 3, wherein the step of identifying comprises decoding tags on the solid support which correspond to the synthetic history of the test compound attached or was once attached to the bead or structural features of the test compound.

34.-47. (Canceled)

48. (Currently amended) A method of identifying a test compound that affects a biological event of interest, the method comprising steps of:

providing a plurality of test compounds;

providing cells containing an inducible nitric oxide synthase reporter gene, wherein expression of the reporter gene results in the production of nitric oxide~~, wherein the presence of the nitric oxide indicates~~ in response to occurrence or non-occurrence of a selected biological event;

contacting the cells with the plurality of test compounds; and

identifying test compounds which promote or inhibit a biological event based on production of nitric oxide.

49. (Previously presented) The method of claim 48, wherein the selected biological event is a protein binding event.

50. (Canceled)

51. (Canceled)

52. (Canceled)

53. (Canceled)

54. (Currently amended) The method of claim [[2]] 48, wherein the biological event is a protein-protein interaction.

55. (Currently amended) A method of identifying a test compound that affects a biological event of interest, the method comprising steps of :

providing a plurality of test compounds associated with a plurality of solid supports, wherein a detecting agent is associated with the solid support;

providing cells containing an inducible nitric oxide synthase reporter gene, wherein expression of the reporter gene results in the production of nitric oxide ~~a reporter gene product,~~

~~wherein the product is secreted by the cell;~~

~~wherein the presence of the product indicates~~ in response to occurrence or non-occurrence of a selected biological event; and

wherein ~~the product~~ nitric oxide is detected by the detecting agent;

releasing the test compounds from the solid supports;

contacting the cells with the plurality of released test compounds; and

identifying test compounds which promote or inhibit the selected biological event based on detection of ~~the reporter gene product~~ nitric oxide by the detecting agent.

56. (Previously presented) The method of claim 55, wherein the detection of the reporter gene product by the detecting agent comprises detecting a change in the fluorescence, phosphorescence, absorbance, chemiluminescence, or enzymatic activity of the detecting agent.

57. (Canceled)

58. (Currently amended) The method of claim [[2]] 48 or 55, wherein the biological event is ~~the~~ binding of IκB to NFκB.

59. (Currently amended) The method of claim [[2]] 48 or 55, wherein the biological event is ~~the~~ binding of p53 to another protein.

60. (Currently amended) The method of claim [[61]] 48 or 55, wherein the biological event is ~~the~~ binding of p53 to MDM2.

61. (Currently amended) The method of claim [[2]] 48 or 55, wherein the biological event is ~~the~~ binding of Rb to another protein.

62. (Currently amended) The method of claim [[2]] 48 or 55, wherein the biological event is ~~the~~ binding of Rb, E2F, and DP1.

63. (Currently amended) The method of claim [[2]] 48 or 55, wherein the biological event is ~~the~~ binding of a transcriptional activator to another protein that inhibits transcriptional activation.

64. (Currently amended) The method of claim [[2]] 48 or 55, wherein the biological event is ~~the~~ binding of a first fusion protein comprising a DNA-binding domain fused to a first protein of interest and a second fusion protein comprising a transcriptional activation domain fused to a second protein of interest known to bind the first protein of interest.

65. (Previously presented) The method of claim 64, wherein the DNA-binding domain is selected from the group consisting of LexA DNA-binding domain and GAL4 DNA-binding domain.

66. (Previously presented) The method of claim 64, wherein the transcriptional activation domain is B42 transcriptional activation domain.

67. (Canceled)

68. (Currently amended) The method of claim [[2]] 3, wherein the linkage is severable by addition of a thiol-containing reagent.